

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF

Art Unit: 1649

GENEVIEVE HANSEN

Examiner: O. Zaghmout

APPLICATION NO: TBA

FILED: DECEMBER 19, 2000

FOR: PLANT TRANSFORMATION METHODS UNDER CONDITIONS
THAT INHIBIT AGROBACTERIUM INDUCED NECROSISAssistant Commissioner for Patents
Washington, D.C. 20231PRELIMINARY AMENDMENT

Sir:

In the claims:

Please add the following new claims:

- 14. A method for transforming a plant cell or tissue with a gene construct, which comprises delivering to or expressing in said plant cell or tissue a nucleotide sequence comprising
- (a) an antisense sequence to a gene encoding a necrosis associated enzyme or necrosis regulatory protein, or
 - (b) a coding sequence of a protein which inhibits apoptosis or suppresses plant disease response,
- before, during or after co-cultivating with *Agrobacterium*, wherein the delivery or expression of said nucleotide sequence inhibits *Agrobacterium* induced necrosis in said plant cell or tissue and said *Agrobacterium* comprises a vector comprising said gene construct.
14. The method according to claim 14, wherein said nucleotide sequence comprises an antisense sequence to a gene encoding a protease, kinase or phosphatase.
15. The method according to claim 14, wherein said nucleotide sequence comprises coding sequence of a bcl-1 p35, iap, nahG, dad-1 or mlo gene.
16. A method for producing a fertile transgenic plant, which comprises:
- (a) transforming a plant cell or tissue comprising delivering to or expressing in said plant cell or tissue a nucleotide sequence comprising
 - (i) an antisense sequence to a gene encoding a necrosis associated enzyme or necrosis regulatory protein, or

(ii) a coding sequence of a protein which inhibits apoptosis or suppresses plant disease response,

before, during or after co-cultivating with *Agrobacterium*, wherein the delivery or expression of said nucleotide sequence inhibits *Agrobacterium* induced necrosis in said plant cell or tissue and said *Agrobacterium* comprises a vector comprising said gene construct; and


(b) regenerating the transformed plant cell or tissue to produce said fertile transgenic plant.

17. The method according to claim 17, wherein said nucleotide sequences comprises an antigen sequence to a gene encoding a protease, kinase, or phosphatase.

18. The method according to claim 17, wherein said nucleotide sequence comprises an antisense sequence to a gene encoding a protease, kinase or phosphatase.--

Respectfully submitted,

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Date: December 19, 2000

DECLARATION AND POWER OF ATTORNEY FOR UNITED STATES PATENT APPLICATIONS

(X) Original

() Supplemental

() Substitute

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name, and

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if more than one name is listed below) of the subject matter which is claimed and for which a United States patent is sought on the invention entitled

Plant Transformation Methods

the specification of which

- ☐ is concurrently submitted herewith.
- ☒ was filed on June 2, 1998, as Application No. 09/089,111 and, if these brackets contain an X [], was amended on .
- ☐ was filed as Patent Cooperation Treaty international Application No. PCT/ , on , 199 , if these brackets contain an X [], entered the national stage in the United States and was accorded Application No. and, if these brackets contain an X [], was amended, subsequent to entry into the national stage on , 199 .

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment (s) referred to above and, if this application was filed as a Patent Cooperation Treaty international application, by an amendments made during the international stage (including any made under Patent Cooperation Treaty Rule 91, Article 19 and Article 34).

I acknowledge the duty to disclose all information which is known by me to be material to the patentability of this application as defined in 37 C.F.R. §1.56.

I hereby claim the benefit under 35 U.S.C. §119 (a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate listed below and under 35 U.S.C. §365(a) of any Patent Cooperation Treaty international application(s) designating at least one country other than the

United States listed below and have also listed below any foreign application(s) for patent or inventor's certificate and Patent Cooperation Treaty international application(s) designating at least one country other than the United States for the same subject matter and having a filing date before that of the application the priority of which is claimed for that subject matter:

Country (or PCT)	Application No.	Filing Date (Month/Day/Year)	Priority Claimed	
_____	_____	_____	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____	_____	_____	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____	_____	_____	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____	_____	_____	<input type="checkbox"/> Yes	<input type="checkbox"/> No

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below:

<u>Application No.</u>	<u>Filing Date</u>
08/867,869	June 2, 1997

I hereby claim the benefit under 35 U.S.C. §120 of any United States application(s) listed below and under 35 U.S.C. §365(c) of any Patent Cooperation Treaty international application(s) designating the United States listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in said prior application(s) in the manner required by the first paragraph of 35 U.S.C. §112, I acknowledge my duty to disclose all information known to me to be material to patentability as defined in 37 C.F.R. §1.56 which became available between the filing date(s) of the prior application(s) and the national or Patent Cooperation Treaty international filing date of this application:

<u>United States</u> <u>Application No.</u>	<u>United States</u> <u>Filing Date</u>	<u>STATUS (Pending,</u> <u>Abandoned or</u> <u>U.S. Patent No.)</u>	<u>International</u> <u>Application No.</u> <u>and Filing Date</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

I hereby appoint the registered practitioners associated with Customer No. 001095 (currently)

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respectively and individually, as my attorneys and agents, with full power of substitution, and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

If these brackets contain an X [x], I hereby authorize the registered practitioners associated with Customer No. 001095 and any others acting on my behalf to take any action relating to this application based on communications from the Patents and Trademarks Division of Novartis Services AG., Basle, Switzerland, or an affiliate thereof or a successor thereto, without direct communication from me.

Please address all telephone calls to Thomas Hoxie at (919) 541-8614. Please address all correspondence to Thomas Hoxie at Novartis Corporation, Patent & Trademark Department, 3054 Cornwallis Road, Research Triangle Park, NC 27709.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

IMPORTANT: Before this declaration is signed, the patent application (the specification, the claims and this declaration) must be read and understood by each person signing it, and no changes may be made in the application after this declaration has been signed.

Full name of sole or first inventor Geneviève Hansen

Inventor's signature Geneviève Hansen Date July 9, 98

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